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10/774,026	02/06/2004	Yongmin Sheng	65783-0034	7730

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EXAMINER
NGUYEN, MADELEINE ANH VINH

ART UNIT	PAPER NUMBER
2625	

MAIL DATE	DELIVERY MODE
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *30 April 2008*.
2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.
3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-34* is/are pending in the application.
    4a) Of the above claim(s) *15-34* is/are withdrawn from consideration.
5)☐ Claim(s) _____ is/are allowed.
6)☒ Claim(s) *1-14* is/are rejected.
7)☐ Claim(s) _____ is/are objected to.
8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.
10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.
    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
    a)☐ All b)☐ Some * c)☐ None of:
      1.☐ Certified copies of the priority documents have been received.
      2.☐ Certified copies of the priority documents have been received in Application No. _____.
      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)
2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3)☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.
5)☐ Notice of Informal Patent Application
6)☐ Other: _____.

DETAILED ACTION

Election/Restrictions

1.   Applicant's election without traverse of group I, claims 1-14, in the reply filed on April

30, 2008 is acknowledged.

2.   Claims 15-34 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as

being drawn to nonelected groups II & III, there being no allowable generic or linking claim.

Election was made **without** traverse in the reply filed on April 30, 2008.

Claim Rejections - 35 USC § 103

3.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or
> described as set forth in section 102 of this title, if the differences between the subject
> matter sought to be patented and the prior art are such that the subject matter as a whole
> would have been obvious at the time the invention was made to a person having ordinary
> skill in the art to which said subject matter pertains. Patentability shall not be negatived
> by the manner in which the invention was made.

4.   Claims 1-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vian (US

Patent No. 6,317,658).

Concerning claim 1, Vian discloses a device management system (Figs.1A-1B),

comprising: a plurality of devices (56, 58), wherein each said device is adapted to perform a

function, wherein each said device function is associated with an input parameter (one of the

system states in Fig.1B) and an output parameter (73), wherein each said input parameter

includes a range of potential input values (system states), wherein each said output parameter is

determined by and associated with at least one said input parameter; and a configuration

component (60), said configuration component including an input matrix comprising said input

values corresponding to said input parameters (74, 75), wherein said input values are selected

and set from said range of potential input values to result in a desired said output value (76),

wherein said input matrix is created through a software application (72), (Abstract; col. 4, lines

1-61; col. 5, lines 17-48; col. 6, lines 1-25; col. 7, line 20 – col. 8, line 55).

Vian does not directly teach that the output parameter includes a range of potential output

values wherein the desired output value is within the range of potential output values. However,

Vian teaches "said neural network controller was trained based on pre-generated vehicle control

distribution data." (Abstract); "control effector commands that yield feasible control subsystem

forces/moments are calculated based on the generated desired forces/moments, operating

conditions and the predefined limits of the control subsystems." (col. 4, lines 47-50); "reduces

the generated desired forces/moments by a proportionate amount until a reduced force/moment is

within the feasible limits of the control subsystem." (col. 4, lines 56-61). "A neural network

system ... by receiving weighted inputs that, ..., can be made to produce appropriate outputs."

(col. 5, lines 17-20); "the training data includes various sets of desired forces/moments and the

predetermined corresponding control effector commands for a wide range of vehicle operation."

(col. 7, lines 39-42). It would have been obvious to one skilled in the art at the time the

invention was made to consider the output parameter includes a range of potential output values

since the teaching of "pre-generated vehicle control distribution data", "the predefined limits of

the control subsystems" and "the predetermined corresponding control effector commands for a

wide range of vehicle operation" in Vian are equivalent to a range of potential output values for

each input parameter. In addition, Vian also teaches the cases when the output parameters are out of the potential output ranges (failure cases), (106, Fig.2B or failure state, Fig.8) since the output parameters should be "appropriate outputs" (col. 4, lines 47-61; col. 5, lines 17-20; col. 7, lines 21-23).

Concerning claims 2-14, Vian further teaches the system of claim 1, wherein said input matrix is modified through said software application and the plurality of devices include a plurality of programmable logic devices, and wherein said plurality of programmable logic devices are located on a vehicle (col. 2, lines 49-52; col. 4, lines 36-42; col. 5, lines 63-67; col. 7, lines 55-59; col. 8, lines 25-29, lines 50-53), (claims 2, 3); a plurality of vehicles and a plurality of configuration components, wherein said plurality of vehicles includes a first vehicle type and a second vehicle type, wherein said plurality of configuration components are substantially identical except for a plurality of configurable characteristics that are configurable through said software application and said vehicle includes only one said configuration component (col. 1, lines 18-21; col. 2, lines 10-40; col. 3, lines 45-57), (claims 4-5); said plurality of device functions includes at least two of: a body control function, an engine control function, a transmission control function, a power seat function, a door function, an instrument cluster function, an environmental function, an overhead console function, and a power function; or said plurality of device functions include a body control function, an engine control function, a transmission control function, a power seat function, a door function, an instrument cluster function, an environmental function, an overhead console function, and a power function (col. 1, lines 26-34; col. 3, lines 52-57; col. 4, lines 8-19; col. 8, lines 8-10; col. 9, lines 5-22), (claim 6-7); the configuration component further includes output matrix and a custom feature matrix; or

said input matrix, said output matrix, and said custom feature matrix are configured to replace a

plurality of nested if statements in a plurality of programming code invoked to perform said

device functions; or said output values are stored in said output matrix, wherein said plurality of

feature values are stored in said feature matrix, wherein said output values are generated from

said corresponding input values in said input matrix and said corresponding feature values in said

feature matrix (col. 4, lines 47-61; col. 5, lines 17-19, lines 27-32; col. 7, lines 20-23, lines 39-

42; col. 8, lines 6-7; col. 9, lines 57-59), (claims 8-10); said input matrix and said output matrix

are set dynamically (col. 4, lines 19-25), (claim 11); said feature matrix is a static feature table

(102, 106, Fig.2B), (claim 12); said plurality of device functions includes a first device function

and a second device function, wherein said plurality of input parameters includes a first input

parameter corresponding to said first device function and a second input parameter

corresponding to said second device function, wherein the setting of said first input parameter

changes the range of potential input values for said second device function; or said plurality of

devices includes a first device and a second device, wherein said first device function is

associated with said first device and wherein said second device function is associated with said

second device (col. 4, lines 1-67), (claims 13-14).

Conclusion

5.   The prior art made of record and not relied upon is considered pertinent to applicant's

disclosure.

McClure et al (US Publication No. US2004/0111188) discloses a protocol selection

matrix adapter that interfaces a host computer to multiple in-vehicle networks.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Madeleine AV Nguyen whose telephone number is 571 272-7466. The examiner can normally be reached on Monday-Friday 9:00am-5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward L. Coles can be reached on 571 272-7402. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Madeleine AV Nguyen/   Madeleine AV Nguyen
Primary Examiner, Art Unit 2625   Primary Examiner
                                                   Art Unit 2625

June 11, 2008